

ALG I - PART 1

CHAPTER 1 OF THE NOTEBOOK

1)

SIMPLIFY

$$2 \times 5^2 - 7 + (8 - 5)$$

$$2 \times 25 - 7 + 3$$

$$50 - 7 + 3$$

$$43 + 3$$

46

2)

MAKE A TABLE FOR

$$5x + 1$$

x	5x + 1
1	6
2	11
3	16
4	21

3)

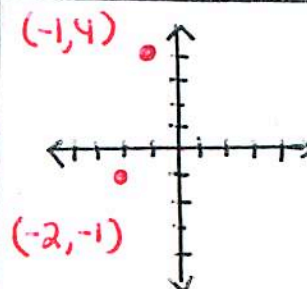
SUBTRACT

$$\frac{7}{8} - \frac{1}{3}$$

$$\frac{21 - 8}{24} = \frac{13}{24}$$

$$\frac{13}{24}$$

4)

PLOT $(-1, 4)$ AND $(-2, -1)$ 

5)

USE PE MD AS TO SIMPLIFY

$$(3 + 5^2) + 7 + 40 \div 2$$

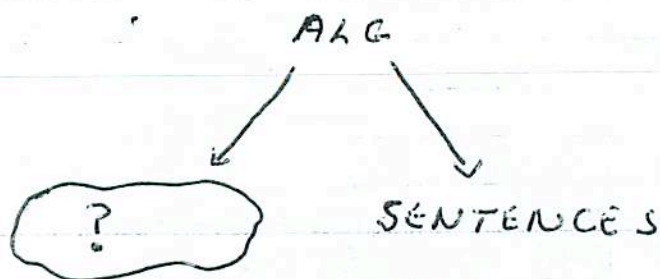
$$(3 + 25) + 7 + 20$$

$$28 + 7 + 20$$

$$35 + 20$$

55

6)



EXPRESSION

7)

IF $A = 1$

ÉVALUÉ

 $B = 2$ $C = 3$

$$\frac{3B + 2C}{4A}$$

$$\Rightarrow \frac{3(2) + 2(3)}{4(1)}$$

$$\frac{6+6}{4} \Rightarrow \frac{12}{4}$$

3

8)

USE PE MD AS TO SIMPLIFY

$$\frac{(5-3)^2 + 4}{8}$$

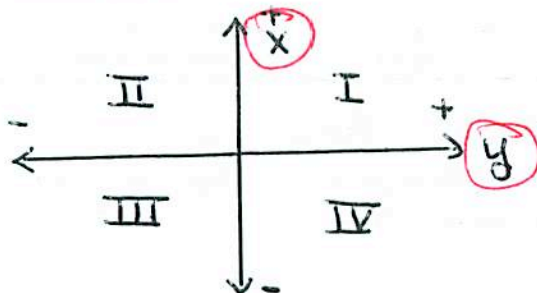


$$\frac{2^2 + 4}{8} = \frac{4+4}{8} = \frac{8}{8}$$

1

9)

IS THIS CORRECT? "YES NO"



NO!

10)

COMBINE LIKE TERMS

$$\cancel{3A} + \cancel{4B} + 8 - \cancel{1A} + \cancel{10B} - 4$$

$$2A + 14B + 4$$

$$2A + 14B + 4$$

CHAPTER 2 OF THE NOTEBOOK

- 1) EVALUATE THE EXPRESSION

$$5x + 3y \quad \text{IF } x = -2 \quad y = 4$$

$$-10 + 12$$

(2)

- 2) WHAT IS THE NEXT TERM IN

$$-125, 25, -5, 1, \underline{-\frac{1}{5}}$$

$$\begin{array}{ccccccc} -125 & & 25 & & -5 & & 1 & & -\frac{1}{5} \\ -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & -5 \end{array}$$

 $-\frac{1}{5}$

- 3) SIMPLIFY

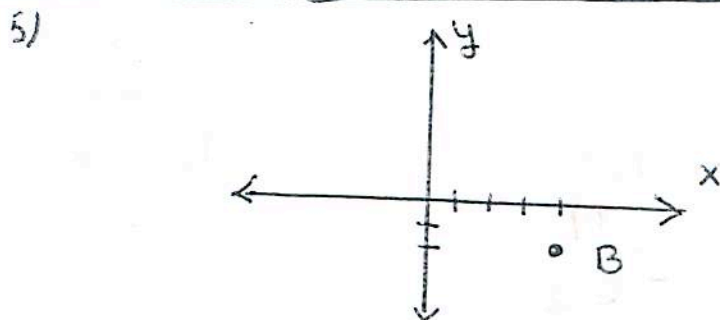
$$(2x + 3y) - (4x - 3y)$$

$$-2x + 6y$$

 $6y - 2x$

- 4) WHICH NUMBER IS THE OPPOSITE OF $\frac{x}{3}$?

$$\frac{3}{x}, \quad \underline{-\frac{x}{3}}$$

 $-\frac{x}{3}$ POINT B \Rightarrow (4, -2)

6)

$$\begin{array}{r} -43 \\ -7 \\ \hline ? \end{array}$$

$$\begin{array}{l} -43 - -7 \\ -43 + 7 \end{array}$$

$$-36$$

7)

FIND THE VALUE IF $A = 3$

$$2A + 5A - 17 \Rightarrow ?$$

$$6 + 15 - 17$$

$$21 - 17$$

$$4$$

8)

FIND THE NEXT 3 TERMS OF

$$3 \times \frac{1}{9}, 3 \times \frac{1}{3}, 1, \underline{3}, \underline{9}, \underline{27}$$

$$\underline{3}, \underline{9}, \underline{27}$$

9)

EVALUATE

$$\frac{(-1)(6)}{(-3)} \Rightarrow \frac{-6}{-3} = 2$$

$$(2)$$

10)

SIMPLIFY

$$(3B + 47) - (2B + 109) \Rightarrow$$

$$3B + 47 - 2B - 109$$

$$B - 62$$

$$\begin{array}{r} -109 \\ 47 \\ \hline -62 \end{array}$$

$$(B - 62)$$

CHAPTER 3 OF THE NOTEBOOK

1)

SIMPLIFY

$$5(3x - 3)$$

$$15x - 15$$

2)

 $7(4x + 3y - 1)$ EQUALS WHICH ONE?

$$27x + 21y - 7, \quad 28x + 21y + 7, \quad 28x + 21y - 7$$

$$28x + 21y - 7$$

3)

SIMPLIFY

$$\frac{-45x}{9x} = -5$$

$$-5$$

4)

SIMPLIFY

$$\frac{3A - 39}{-3}$$

$$\frac{3A}{-3} - \frac{39}{-3}$$

$$-1A + 13$$

$$13 - 1A$$

$$13 - A$$

5)

ÉVALUATE

$$|-5| - |-4| \Rightarrow ?$$

$$5 - 4$$

$$1$$

6) RADICAL WORK

$$\sqrt{24} \Rightarrow \sqrt{4} \sqrt{6}$$

$$2\sqrt{6}$$

$$\sqrt{1} = 1$$

$$\sqrt{4} = 2$$

$$\sqrt{9} = 3$$

$$\sqrt{16} = 4$$

$$2\sqrt{6}$$

7) RADICAL WORK

$$\sqrt{3} \cdot \sqrt{12} \Rightarrow \sqrt{36}$$

$$6$$

$$\sqrt{25} = 5$$

$$\sqrt{36} = 6$$

$$\sqrt{49} = 7$$

$$\sqrt{64} = 8$$

$$6$$

8) RADICAL WORK

$$\sqrt{324} \Rightarrow 18$$

$$\sqrt{81} = 9$$

$$\sqrt{100} = 10$$

$$\sqrt{121} = 11$$

$$\sqrt{144} = 12$$

$$18$$

9) RADICAL WORK

$$1\sqrt{5} - 3\sqrt{5} \Rightarrow 4\sqrt{5}$$

$$\sqrt{169} = 13$$

$$\sqrt{196} = 14$$

$$\sqrt{225} = 15$$

$$\sqrt{256} = 16$$

$$4\sqrt{5}$$

10) RADICAL WORK

$$2\sqrt{12} \Rightarrow$$

$$2 \cdot \sqrt{4} \cdot \sqrt{3}$$

$$2 \cdot 2 \sqrt{3}$$

$$\sqrt{289} = 17$$

$$\sqrt{324} = 18$$

$$\sqrt{361} = 19$$

$$\sqrt{400} = 20$$

$$4\sqrt{3}$$